Serial No.: 09/689,533

REMARKS

A petition and fee for a one-month extension of time to respond to the Office Action is hereby submitted. The Commissioner is authorized to charge the fee for a one-month extension of time to Deposit Account 18-0988 (Docket No.: YAMAP0741US).

Claims 1-21, 23-25 and 27-35 are pending in the application. Favorable reconsideration of the application is respectfully requested.

I. REQUEST FOR CLARIFICATION OF REFERENCES CITED

Applicants note that the Office Action mailed on April 22, 2004 relied on newly cited U.S. Patent No. 5,963,909 to *Warren et al.* However, the *Warren et al.* reference was not included in the Form PTO-892, which accompanied the Office Action. Applicants respectfully request that the Examiner include *Warren et al.* in a subsequent form PTO-892 to ensure that the reference is included on the cover of any resultant patent.

II. REJECTION OF CLAIMS 1-6, 8-21, 23-25 AND 27-35 UNDER 35 USC §103(a)

Claims 1-6, 8-21, 23-25 and 27-35 stand rejected under 35 USC §103(a) based on U.S. Patent No. 5,963,970 to *Davis* in view of U.S. Patent No. 5,963,909 to *Warren et al. (*hereinafter *Warren)* Withdrawal of the rejection is respectfully requested for at least the following reasons.

Claim 1:

Claim 1 recites a read step of reading out a last piece of information which has been written in the information storage area within a predetermined permitted update count. Such feature is advantageous as it allows a user to update information only a limited number of times, thereby preventing illegal alterations from becoming widespread.[1]

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[1] See, e.g., Spec., page 10, line 30 through page 11, line 4

The Examiner admits that the above feature is not described in *Davis*.[2] However, the Examiner contends that *Warren* describes such feature of reading out a last piece of information which has been written in the information storage area within a predetermined permitted update count. (Citing column 2, lines 3-16 and column 5, lines 33 through column 7, line 47 and the Abstract).

Warren describes a multi-media copy management system that includes two stages. A first stage is implemented at the master source level and consists of embedding a Standard Master Tag (SMT) into a data source, e.g., embedding an SMT into audio and/or video data prior to mass production of media containing the audio and/or video data. A second stage is implemented in a player/recorder copy management unit 150. The player/recorder 150 receives a Standard Copy Tag (SCT) data signal via a terminal 160, and searches the combined signal stored on the media to detect the presence of SMT data, which may have been inserted at the master source level, and/or SCT data, which previously may have been inserted by the player/recorder, e.g., inserted during a previous copy operation.[3] The player/recorder compares the data in the SMT and SCT to a Valid Copy Threshold (VCT), which indicates the number of allowed copies that may be made. If the data in the SMT and/or SCT is less than the VCT, then the player recorder permits copying of the data. During the record process, the copied data receives an updated SCT to reflect the next generation of the data. If the data in the SMT and/or SCT exceeds the VCT, then additional copies of the data are not permitted.[4] Thus, *Warren* is concerned with a system that controls the number of times data can be reproduced from a media to be copied, to thwart attempts by unauthorized tamperers (e.g., pirates) to defeat the system.[5]

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[2] See page 3, lines 9-11 of the Office Action

[3] See column 5,lines 35-57 of *Warren*

[4] See column 10, line 61 through column 11, line 4 of *Warren*

[5] See column 1, lines 36-49 of *Warren*

The portion of *Warren* cited by the Examiner, however, does not disclose "a read step of *reading out a last piece of information which has been written in the information storage area within a predetermined permitted update count*", as recited in claim 1 of the present application. *Warren* simply discloses a method for minimizing unauthorized copying of data, e.g., audio and video data. Therefore, the Examiner has not shown all the features of claim 1 and, thus, the rejection of claim 1 is improper.

In addition, a person skilled in the art would not be motivated to combine the teachings of *Davis* and *Warren*, since *Davis* and *Warren* are directed to different inventive concepts. *Warren* is concerned with *controlling the reproduction of a multi-media data signal*, which is stored on a source media or distributed via a communication network.[6] *Davis* is concerned with a method and apparatus for *keeping track of erase cycles performed on a plurality of storage clocks in flash memory.* In other words, *Warren* relates to the prevention of unauthorized copying, while *Davis* relates to extending the life of flash memory. Therefore, a person skilled in the art would not be motivated to combine *Davis* and *Warren*, as they are non-analogous art. Moreover, even if the disclosures were combined, they would not arrive at the claimed invention.

Claim 1 further recites that information can be erased from the non-volatile memory *in a unit of sectors*. The sectors include a plurality of WORDs. The Examiner contends that this feature is disclosed by *Davis*. However, *Davis* describes that an active wear-bar block (which the Examiner cites as equivalent to a WORD) is completely erased while an inactive wear-bar block becomes active, and the role of the two wear-bar blocks is reversed.[7]

As a result, it is clear that only one wear-bar block is erased each time. Therefore, *Davis* does not teach or suggest the feature wherein information can be erased from the non-volatile memory in a unit of *sectors*, as recited in claim 1 of the present application.

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[6] See column 1, line 66 through column 2, line 2 of *Warren*

[7] See, e.g., column 3, lines 20-24 of Davis

Claim 12:

Claim 12 defines an apparatus including a microprocessor unit for reading out a last piece of information which has been written in the at least one WORD of the information storage area within a predetermined permitted update count, similar to claim 1. Accordingly, claim 12 may be distinguished for at least the same reasons as set forth above with respect to claim 1.

Claim 21:

Claim 21 is directed towards a contents count managing method. Claim 21 recites that the contents usage count storage area of the non-volatile memory is in a sector which includes a first program to be executed after a reset.

An advantage of this feature is that when data stored in the storage area is erased, data in the program area is also erased. Therefore, if the program area is erased, the microprocessor unit cannot be initialized properly so that the MPU goes out of control. Thus, the user can change the regional information only a predetermined number of times.[8]

The Examiner asserts that this feature is taught in *Davis* at column 4, lines 10-41. However, applicants respectfully submit that this portion of *Davis* simply describes that the memory device includes a storage section and a wear-bar section, and the alteration of the wear-bar blocks to be active, including the information of number of erasures.

Davis is silent as to a sector which includes a first program to be executed after a reset. Also, *Davis* is silent as to any contents usage count storage. The present applications describes that a content usage count is a count of the number of plays and copies made.[9] *Davis*, on the other hand, is directed to the number of *erase* cycles.

Therefore, *Davis* does not teach or suggest a contents usage count storage area of the non-volatile memory in a sector which includes a first program to be executed

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[8] See, e.g., Spec., page 23, line 25 through page 24, line 9

[9] See, e.g., Spec. page 3, lines 20-21

after a reset. Nor does *Davis* teach or suggest the advantages associated with such a feature. Moreover, *Warren* does not make up for this deficiency in *Davis*.

Claim 25:

Claim 25 is an apparatus claim corresponding to method claim 21, and can be distinguished over the teachings of *Davis* and *Warren* for at least the same reasons described above.

Claim 29:

Claim 29 recites that the microprocessor unit searches for and reads out a last piece of information which has been written in the information storage area *within a predetermined permitted update count*. This feature is similar to that discussed above in relation to claim 1. Accordingly, claim 29 can be distinguished for at least the same reasons.

As a result, independent claims 1, 12, 21, 25 and 29 are patentably distinguished over the teachings of *Davis* and *Warren*, whether taken alone or in combination.

Dependent Claims:

The remaining dependent claims directly or indirectly depend from the above independent claims and therefore can be distinguished for at least the same reasons..

Claims 4 and 11, further recite the feature wherein the information storage area is provided in a same sector as an initialization operation program which is a first program to be executed after a reset. This is advantageous, for example, in that if a user attempts to erase data stored in the information storage area 204, data in the program area 203 also is erased. Since the program area is erased, the MPU cannot be properly initialized and the MPU goes out of control.[10]

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[10] See, e.g., Spec., page 23, line 29 through page 24, line 7

The Examiner contends that this feature is disclosed by *Davis*, and cites to column 4, lines 10-41 and Fig. 3 of *Davis*. Fig. 3 of *Davis* is a memory map of the invention.[11] Thus, Fig. 3 of Davis does not on its face disclose the features of claims 4 and 11.

Now, referring to the cited portion of *Davis*, it is disclosed that the flash memory of Fig. 3 includes two sections: a storage section 200 having a number of storage blocks, and a wear-bar section 220 having two wear blocks 230, 240. Data can be stored in the storage section 200, while the wear-bar section stores data related to the number of times each storage block is erased. The wear blocks 230, 240 operate so that at any time, one wear block will be active and the other wear block will be inactive. The roles of the active and inactive wear-bar blocks is exchanged at a proper time when erasure of the active wear bar block is necessary to update the erase count values.

The Applicants respectfully submit that nowhere in the cited portion does *Davis* teach or suggest that the information storage area is provided in *a same sector as an initialization operation program which is a first program to be executed after a reset*, as recited in claims 4 and 11.

Accordingly withdrawal of the rejection of the dependent claims is respectfully requested.

III. REJECTION OF CLAIM 7 UNDER 35 USC §103(a)

Claim 7 stands rejected under 35 USC §103(a) based on *Davis* in view of *Warren*, and further in view of U.S. Patent No. 6,122,434 to *Sawabe*. Withdrawal of the rejection is respectfully requested for at least the following reasons.

Claim 7 depends from claim 1 and can be distinguished over *Davis* and *Warren* for at least the same reasons. *Sawabe* does not make up for the above-discussed deficiencies in *Davis* and *Warren*. Thus, withdrawal of the rejection is respectfully requested.

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[11] Column 2, lines 46-47 of *Davis*

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IV. CONCLUSION

Accordingly, all claims are believed to be allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

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DATE: August 19, 2004

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